FORMERLY UTILIZED SITES REMEDIAL ACTION PROGRAM OVERSIGHT AND MONITORING COOPERATIVE AGREEMENT

3rd Quarter: July Through September 2015 Report





Missouri Department of Natural Resources

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COVER PHOTO: At St. Cin Park in Hazelwood, USACE remediated several areas during the quarter and sampled lawns of nearby residences along the creek. The excavation area near the tennis court is shown.

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St. Cin Park in Hazelwood. USACE contractors are shown surveying and sampling at several areas within the park. This testing will determine if remedial goals were met after removal of excavated soil. USACE expects remediation will be completed sometime in the next quarter. The City of Hazelwood has closed the park to the public until remediation is completed.

History of the Formerly Utilized Sites Remedial Action Program Sites

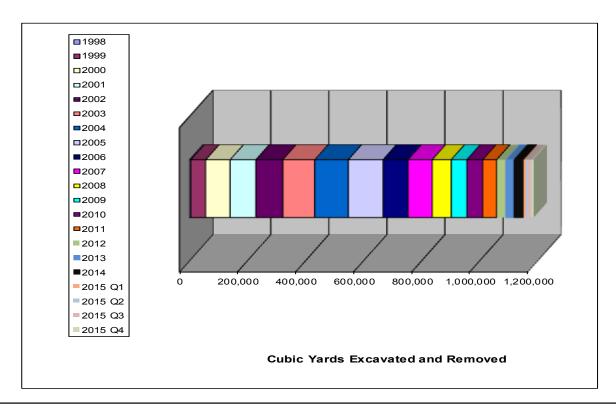
The St. Louis Downtown Site (SLDS) processed uranium for the nation's early atomic energy program. In 1946, the U.S. Department of Energy's (DOE) predecessor agencies began utilizing the St. Louis Airport Site (SLAPS) as a storage area for radioactive wastes and processed residues, the majority of which originated at the SLDS. Methods of storage at the SLAPS included both uncovered bulk storage piles and materials containerized in drums. In 1966 the materials at the SLAPS were sold by the Atomic Energy Commission (AEC) and were shipped to a facility at 9200 Latty Avenue (Futura), where the majority of the material was dried and shipped to out-of-state processing facilities. 8,700 tons of radioactively contaminated barium sulfate processed waste were mixed with 39,000 tons of soil and disposed of at West Lake Landfill in 1973. (West Lake Landfill is being addressed separately from the Formerly Utilized Sites Remedial Action Program [FUSRAP].)

Processing, transportation, storage, and management practices during the above-stated period led to the contamination of the three major FUSRAP sites: SLDS, SLAPS, and the Hazelwood Interim Storage Site (HISS)/ Futura, with the latter two sites being placed on the National Priorities List (NPL) in 1989. In addition, approximately 78 contaminated vicinity properties have been identified as SLAPS Vicinity Properties (VPs).

On October 13, 1997, the Energy & Water Appropriations Bill transferred the responsibility for the remediation of FUSRAP properties from the DOE to the U. S. Army Corps of Engineers (USACE). The total volumes of contaminated soils, sediments and debris at St. Louis FUSRAP sites were estimated to have been about 1.1 million cubic yards. USACE has already excavated more soil than had been originally estimated.

Status of Work Completed This Quarter by USACE

MAJOR AREA	SPECIFIC SITES	WORK DESCRIPTION	
North County (NC)	SLAPS Vicinity Properties	Sampling and remediation of portions of VP57 and VP58 in preparation of a St. Louis Metropolitan Sewer District (MSD) project were completed. Remediation work at St. Cin Park along Coldwater Creek began. Sampling of Coldwater Creek between Frost and St. Denis Bridge continued. Sampling of residential lawns in the St. Cin Park area began. The volume of soil removed from the vicinity properties this quarter was about 1,409 yd ³ .	
North County (NC)	HISS/Futura and Latty Ave. Vicinity Properties	Most remediation work has been completed on these properties. Final documentation of this status is expected next quarter. No soil or debris was shipped from these properties during the quarter.	
Saint Louis Downtown Sites (SLDS)	Saint Louis Downtown Site and Vicinity Properties	Building 101 excavation at Plant 6 West Half continued during the quarter. Additional sampling for a remedial investigation addendum for the SLDS was being considered. The volume of soil removed from St. Louis Downtown Sites in this quarter was about 6,315 yd ³ .	
NON-SITE SPECIFIC		11 utility support operations were undertaken by the USACE during the quarter. The total volume of soil and debris removed this quarter for the entire St. Louis FUSRAP project was about 7,724 yd ³ . (For reference, about 35,839 yd ³ of material was removed from all St. Louis FUSRAP project sites during Federal Fiscal Year 2015.)	



Years and quarters on this chart are based on the Federal Fiscal Year (FFY). For example, FFY 2015 is October 1, 2014, through September 30, 2015.

Work Performed by Department Personnel

DOCUMENT REVIEWS

The Missouri Department of Natural Resources (department) Federal Facilities Section provides technical review on major decision documents, work plans, pre-design investigation reports, remedial designs, and post-remedial action reports.

Comments on document content are submitted to the USACE for response and become part of the public record. Listed below are both documents reviewed by the department during this quarter and documents previously reviewed for which some resolution of comments is pending.

1. "Third Five-Year Review Report for the FUSRAP St. Louis Sites," Revision 0, dated August 17, 2015.

The department reviewed the draft version of this document. Missouri Department of Health and Senior Services (DHSS) review of the draft document has not been completed yet. The department requested more specific information on utility and property owner outreach. We also asked for more frequent contact of entities to prevent miscommunication regarding status of properties. We had asked that the document include consideration of interim institutional controls use. The department also recommended adding information on status to the included tables of properties and expanded discussions in several sections. We asked for USACE to consider publishing this report on the FUSRAP web pages. The department's comments on the draft were transmitted February 27. USACE considered and responded to our comments on the draft version of this document. USACE responses were acceptable to us. DHSS final review comments on the report will be transmitted upon completion of their review.

DOCUMENT REVIEWS (CONTINUED)

2. "Post Remedial Action Report and Final Status Survey Evaluation for the Accessible Soils Within the Kiesel Hall Street Properties; St. Louis, Missouri," Revision B, dated July 1, 2015

The department and DHSS reviewed this document. DHSS had no comments regarding the draft document. The department requested clarification regarding how inaccessible areas within these properties, that might become accessible in the future, would be handled. Our comments were transmitted on August 4.

3. "Pre-Design Investigation Summary Report for the St. Louis Vicinity Property 10L340133 (Spirit Asphalt)," Revision B, dated July 27, 2015.

The department reviewed this document. We requested additional detail on checks USACE performed to ensure potential additional hazards that could affect remedial design and the potential for co-located contamination unrelated to FUSRAP have been considered during the pre-design investigation. Our comments were transmitted on September 2.

4. "Remedial Design/Remedial Action Work Description Archdiocese of St. Louis Property, Supplement Number 3 to the Remedial Action Work Plan Coldwater Creek Properties; FUSRAP North St. Louis County Sites," Revision B, dated July 20, 2015.

The department requested advance notification prior to backfill. This would allow us to collect independent samples of survey units as they are completed. We requested an explanation of the criteria used to determine when radiation symbols appear on signs around areas being remediated. This would be related to the calculated potential dose to the public. We asked for clarification regarding perimeter air monitoring and logging of this information. We also asked for information regarding truck sampling and the criteria used to determine that a truck loaded with excavated material met best management practices for dust control for transport. Our comments were transmitted to USACE on September 1.

SITE OBSERVATIONS

Field personnel conduct site visits to observe and document the status of remedial actions, environmental monitoring, contaminant migration prevention and pre-design investigations. USACE personnel are immediately notified of findings and reports are filed for public record.

The following site visits were conducted on these dates during this quarter:

SPECIFIC SITES	JULY	AUGUST	SEPTEMBER
North County Sites (HISS/Futura, SLAPS, and Vicinity Properties)	7, 9, 10, 16, 17, 24, 29	3, 4, 7, 20, 25, 27	2, 9, 23, 30
SLDS	15, 27		16

SAMPLING

Samples are obtained by department personnel and are shipped to a contract laboratory for analysis. The purposes of sample collection include confirmation of results from remedial actions, storm water controls/treatment and investigating locations of potential concern.

Department of Natural Resources St. Cin Park Confirmation Sampling

The department obtained four confirmation soil samples at completed excavations in St. Cin Park. These samples were taken on September 9. The samples have been analyzed; our analytical results are available upon request. No contamination above project remediation goals was found in the completed excavations. USACE backfilled these areas but remediation at other survey units in the park continued during the quarter.

Department of Natural Resources Residential Lawn Sampling

The department obtained seven soil samples in the vicinity of Coldwater Creek at residences near Cades Cove and Slusser Lane in Florissant. The samples have been analyzed; our results are available upon request. No contamination above FUSRAP project remediation goals was found. USACE will perform additional sampling in the area behind the residences along Cades Cove near Coldwater Creek in the future.

COMMUNITY RELATIONS

Department personnel are available for questions, requests for information or as a means of submitting comments and concerns. It is our goal to encourage community involvement and ensure that the concerns of Missouri's citizens are addressed. Special requests regarding field oversight, research and presentations are welcome. Contact the Federal Facilities Section at (573) 751-3907 for assistance.

OVERSIGHT COMMITTEE

The St. Louis Oversight Committee meets periodically to get updates on current remediation work, discuss the history of the sites, to be briefed on USACE future plans and provide community feedback to USACE. The St. Louis Oversight Committee held its last public meeting on August 20, 6-8 p.m. at the Hazelwood Civic Center East, 8969 Dunn Road, Hazelwood. USACE gave a briefing, St. Louis County Health Department gave an update on their efforts regarding Coldwater Creek and Bridgeton Landfill, Department of Natural Resources presented St. Ferdinand Park sampling results (results showed no contamination of surface soil above FUSRAP remediation goals at 11 locations near Coldwater Creek) and community activist Kim Visintine presented an update regarding the informal health survey self-report of residents mapping efforts. The next public meeting of the committee has not yet been set but is expected to be held in early 2016. A current contact for the St. Louis Oversight Committee is Carl Chappell at Cfchappell@sbcglobal.net.

UPCOMING USACE PUBLIC MEETING ON COLDWATER CREEK REMEDIATIONS

USACE will hold a public meeting and poster session on December 9, 6-8:30 p.m. at the James J Egan Center, 1 James J Egan Drive in Florissant. USACE is expected to give an update on sampling efforts along Coldwater Creek from Frost to St. Denis Bridge. This sampling is scheduled to be completed in early 2016. Later in 2016, USACE will begin sampling along Coldwater Creek from St. Denis Bridge to New Halls Ferry Road. Sampling to date has revealed contaminated areas in St. Cin Park, Duchesne Park and an Archdiocese property adjacent to Saint Ferdinand Cemetery that will need to be remediated. USACE will also be providing updates on further characterization of residential lawn contamination. USACE has prioritized these cleanups and remediation of St. Cin Park is underway. USACE will also give an update on remediation efforts and sampling at St. Cin Park and residences that border Coldwater Creek.

REGULATORS COORDINATION MEETINGS

Personnel from EPA, USACE and the department periodically meet in person and by conference call to discuss site status, document schedules, landowner assistance projects and other similar issues. These coordination meetings are beneficial as they keep the parties informed of site status, allow for discussion of cleanup issues and provide coordination of agency activities as they relate to cleanup of the sites. Meetings were held on July 29, August 26 and September 23 during this quarter.

Site Activities This Quarter

USACE REMEDIAL ACTIONS

NORTH COUNTY

- Characterization sampling of Pershall Rd. was on hold during the quarter. Remediation at St. Cin Park in Hazelwood began.
- Characterization sampling of Coldwater Creek between Frost Ave. and St. Denis bridge continued. Additional sampling of residential lawns near St. Cin Park began.
- VP 57/58 characterization sampling and remediation in preparation for an MSD project neared completion during the quarter.

ST. LOUIS DOWNTOWN SITE

- Plant 6 (Mallinckrodt) excavation of soils underlying building 101 continued during the quarter.
- Utility supports within the SLDS record of decision boundaries were completed during the quarter.
- USACE considered additional sampling requirements for a remedial investigation addendum.



At St. Cin Park in Hazelwood, tarped trucks loaded with excavated soil are swipe sampled for removable dust contamination to prepare for transportation to St. Louis Airport Sites. Excavated materials are then shipped by covered railcar to an out of state repository from St. Louis Airport Site.



Plant 6 West Half Building 101 at SLDS. Excavation of this area proceeded during the quarter and is expected to be completed in 2016.

Tasks and Goals for Next Quarter

NORTH COUNTY

- USACE characterization sampling of Coldwater Creek between Frost Ave. and St. Denis bridge and residences along Coldwater Creek will continue.
- USACE Pershall Road characterization sampling may be completed. Banshee Rd. additional verification sampling may begin.
- USACE will continue remediation at and near St. Cin Park adjacent to Coldwater Creek.
- USACE may begin work at Duchesne Park or the Archdiocese Property in Florissant during the next quarter.

ST. LOUIS DOWNTOWN SITE

- USACE remediation of DT-2 (city property) may continue. This work is currently expected to be completed in mid-2016.
- USACE Plant 6/building 101 area soil excavation will continue. This work is currently expected to be completed mid-2016.
- Support of utility excavation activities at the St. Louis Downtown Sites will continue.
- Additional sampling locations for a remedial investigation addendum may be identified and sampled.

DOCUMENT REVIEWS

Review of the following documents and data are potentially anticipated during the next quarter:

NORTH COUNTY

- Remedial Design/Remedial Action Work Description for Duchesne Park
- Remedial Design/Remedial Action Work Description Parcel 10L340133 (Spirit Asphalt)
- Futura Environmental Covenant Draft
- Coldwater Creek Frost to St. Denis Pre-Design Investigation Report
- Latty Avenue Pre-Design Investigation Report
- Pre-Design Investigation Report and Remedial Design/Remedial Action Work Description for Palm Drive adjacent to Coldwater Creek

ST. LOUIS DOWNTOWN SITE

- Explanation of Significant Differences for Kiesel Hall Street Area Expansion
- Kiesel Riverfront Property Post Remedial Action Report

SITE OBSERVATIONS AND SAMPLING

Our on-going role in providing site observations and sampling investigations will continue as per previous quarters.

DEPARTMENT PROJECTS

Staff will continue to work on committees affiliated with long-term stewardship, groundwater and the Five-Year Review.

LONG-TERM STEWARDSHIP

Long-term stewardship applies to sites and properties where long-term management of contaminated environmental media is necessary to protect human health and the environment over time. This generally includes the establishment and maintenance of physical and legal controls, implementation entities, authorities, accountability mechanisms, information and data management systems, and other resources. The need for long-term stewardship will exist for areas of inaccessible contamination at both the north St. Louis County and downtown properties located under roads, railroads, buildings and other similar structures deemed by the current owners to be vital or in-use. It also exists for portions of the downtown site for which remediation goals are deemed suitable for industrial uses. Completion of the project is expected by 2020; this will be followed by a two-year transitional period to transfer responsibility from the USACE to DOE.

Financial Reporting

The Department's Hazardous Waste Program submits a financial report separate from this document. The report includes costs incurred during the reporting period with request for reimbursement forms.

Status of Work Completed This Quarter

* USACE Cooperative Agreement funds were not used for all of the staff listed as participating in this training, conference, or meeting.

^{**} USACE Cooperative Agreement funds were used for a percentage of this training.

TRAINING, CONFERENCE OR MEETING	DATES	DEPARTMENTAL STAFF
Preparatory Meeting for St. Cin Remediation	7/1	Carey, Alexander**
FFS Section Meeting	9/21	Carey, Alexander, Anderson, Moore*
HWP All Staff Meetings	9/21	Carey, Alexander, Anderson, Drake, Doster, Moore*
SLDS Monthly Meeting	7/15, 9/16	Carey, Moore
Oversight Committee Meeting	8/20	Carey, Moore, Drake, Lamons
Computer Security Training	7/9, 8/5, 9/4	Carey, Alexander, Moore*
Regulator Conference Calls, Bi-Weekly Meetings	7/29, 8/26, 9/23	Carey, Drake, Anderson, Moore, Alexander